

# New species and new records of the genus *Scopodes* Erichson from New Guinea. Third Supplement to the “Revision of the genus *Scopodes* Erichson from New Guinea”

(Insecta, Coleoptera, Carabidae, Pentagonicinae)

Martin Baehr

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*Scopodes schoenhuberi*, spec. nov. is described and included in the most recent key to the New Guinean *Scopodes*. Additional records of *S. aspericollis* Baehr, *S. darlingtoni* Baehr, *S. robustus* Baehr, and *S. wei* Bell & Bell are presented.

Dr. Martin Baehr, Zoologische Staatssammlung, Münchhausenstr. 21, D-81247 München, Germany.

## Introduction

During his most recent collecting trip to New Guinea in 1998, A. Riedel, München, again captured a number of specimens of the genus *Scopodes* in Papua New Guinea, of which one species is new though closely related to *S. hornabrooki* Baehr, a species described recently.

All measurements and ratios were obtained in the same manner as in the revision of the *Scopodes* of New Guinea (Baehr 1994) and both supplements to this revision (Baehr 1995, 1998).

The types and the additional material is preserved in the Zoologische Staatssammlung München (ZSM) and in the working collection of the author (CBM), in part also as a permanent loan (ZSM-CBM).

## *Scopodes aspericollis* Baehr

Baehr, 1994: 109; 1998: 146.

New record: 1♂, Papua NG, Morobe-Pr., Saureri, 10 km s. Garaina, 1800-2100 m, 26.3.1998, A. Riedel (CBM).

A species known so far only from a small area around Wau and from the Eastern Highlands in Papua New Guinea. The new record slightly enlarges the range to the southeast.

\* Results of the entomological collectings of A. Riedel in New Guinea in 1998

### *Scopodes wei* Bell & Bell

Bell & Bell, 1989: 160; Baehr 1994: 112; 1998: 148.

New record: 1♂, Papua NG, Morobe-Pr., Aseki-Menyamya, 2000-2200 m, 12.4.1998, A. Riedel (CBM).

The new record is located within the rather restricted range of this species in eastern Papua New Guinea.

### *Scopodes darlingtoni* Baehr

Baehr, 1994: 122; 1995: 112; 1998: 148.

*Scopodes basalis* Darlington, 1968: 200 (nom. praeocc.)

New records: 9♂♂, 5♀♀, Papua NG, Morobe-Pr., Aseki, Oiwa, 1700-1800 m, 10.-11.4.1998, A. Riedel (CBM, ZSM); 1♂, Papua NG, Morobe-Pr., Aseki, Oiwa-Langama Rd. 1600-1700 m, 13.3.1998, A. Riedel (CBM); 1♀, Papua NG, Morobe-Pr., Aiewa nr. Podu, s. Aseki, 1500-1700 m, 14.4.1998, A. Riedel (CBM).

This is a widespread species that ranges over large parts of Papua New Guinea. The repeated records apparently demonstrate that it is one of the commonest species of the New Guinean *Scopodes*.

### *Scopodes robustus* Baehr

Baehr, 1994: 132.

New records: 1♀, Papua NG, Morobe-Pr., Aiewa nr. Podu, s. Aseki, 1500-1700 m, 14.4.1998, A. Riedel (CBM); 2♂♂; Papua NG, Morobe-Pr., Aseki, 1200-1400 m, 14.4.1998, A. Riedel (CBM).

This species was so far recorded from central and eastern Irian Jaya only. The new records considerably enlarge the range to the east and demonstrate that the species is distributed at least over the whole of the montane centre of New Guinea.

### *Scopodes schoenhuberi*, spec. nov.

Figs 1, 2

**Types.** Holotype: ♀, Papua NG, Morobe-Pr. Saureri, 10 km s. Garaina, 1400-1700 m, 22.3.1998, A. Riedel (ZSM-CBM). – Paratype: 1♀, Papua NG, Morobe-Pr. Saureri, 10 km s. Garaina, 1800-2150 m, 26.3.1998, A. Riedel (CBM).

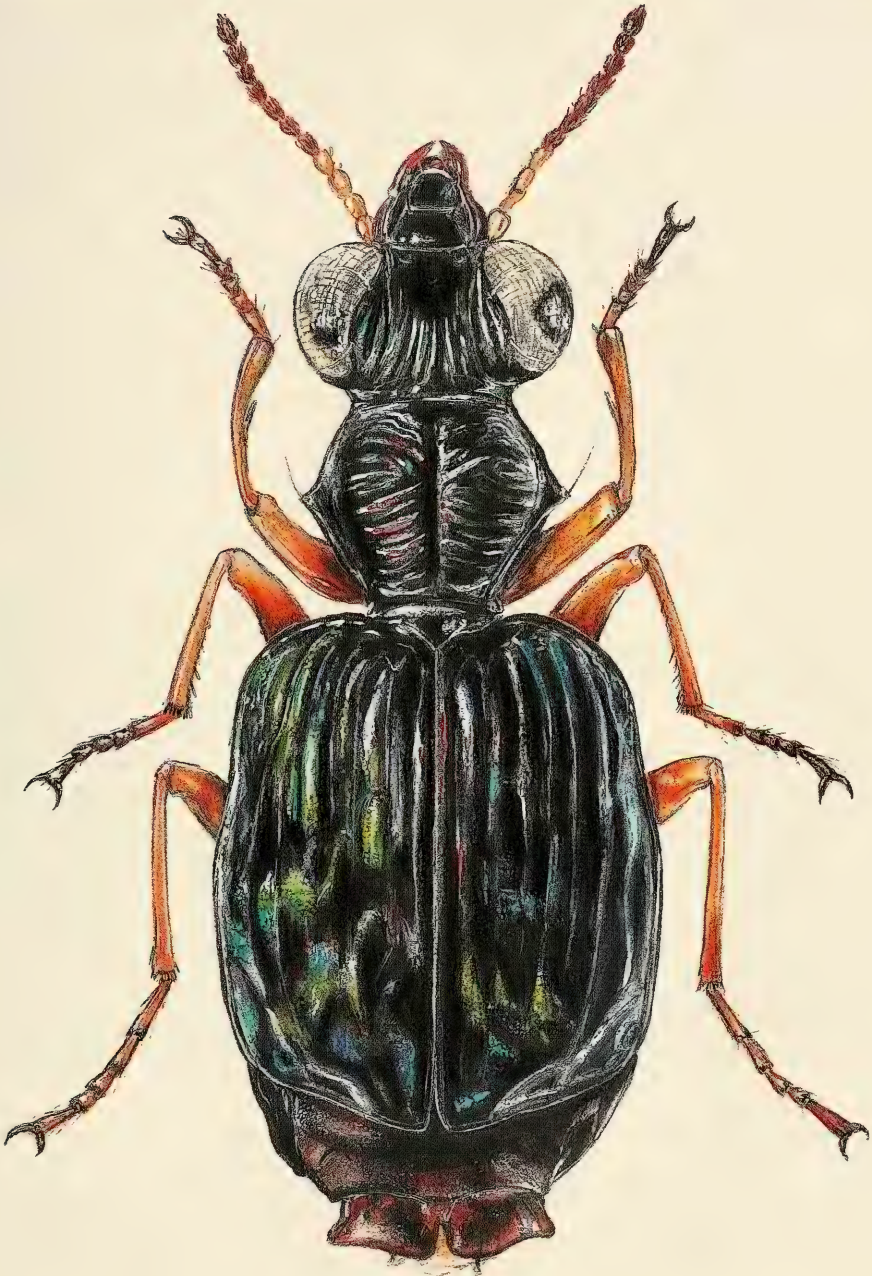
**Diagnosis.** Small, short, and very wide, bright green species with posteriorly markedly widened elytra, blue, rather little contrasting elytral foveae, and yellow legs and antennae. Further distinguished from the most closely related species *S. hornabrooki* Baehr by incomplete elytral striation, comparatively wider pronotum, and comparatively shorter elytra.

#### Description

Measurements. Length: 3.2 mm; width: 1.5 mm. Ratios. Width head/pronotum: 1.14-1.15; width/length of pronotum: 1.32-1.34; width elytra/pronotum: 1.68-1.70; length/width of elytra: 1.17.

Colour. Bright green, elytra with some cupreous reflexions. Labrum, clypeus, and mandibles black. Antenna yellow, faintly darkened towards apex. Legs light yellow, apices of tarsomeres dark.

Head. Eyes large, space between inner border of eyes about as wide as diameter of eye. Labrum rather short and wide, gently triangular, anterior border fairly convex, 6-setose, in basal part medially impressed. Clypeus with shallow, transverse sulcus, basal part irregularly striate, glossy. Labrum, clypeus, and anterior part of frons with some very inconspicuous additional hairs. Anterior triangular field of frons more or less wrinkled, rather glossy. Frons between eyes with c. 7 deep, rather straight and regular sulci that reach far posteriorly. Summit and neck coarsely wrinkled, impunctate. Whole upper surface of head smooth, glossy. Antenna short, median segments c. 1.1-1.2 × as long as wide. Pronotum. Convex, wide, rather trapezoidal, widest at lateral triangular process in anterior third. Lateral border line distinct. Margin anteriorly convex, posteriorly of lateral triangular process almost



R. H. V. Bandner

Fig. 1. *Scopodes schoenhuberi*, spec. nov. Habitus. Length: 3.2 mm.



Fig. 2. *Scopodes schoenhuberi*, spec. nov. ♀ stylomeres 1 and 2. Scale: 0.1 mm.

straight, in front of posterior angles not concave. Lateral triangular process distinct, fairly small, laterally rather projecting. Posterior marginal seta absent. Anterior margin slightly convex, posterior margin straight. Median line distinct, deep, not reaching apex nor base. Transverse sulcus in apical third barely visible. Whole upper surface with very coarse, rather dense, in posterior part fairly regular transverse sulci. Surface almost without puncturation, without microreticulation, rather smooth, glossy.

Elytra. Very short and wide, moderately convex. Base comparatively narrow, elytra markedly widened towards apex, widest in apical third. Sides strongly rounded, in anterior third rather deeply excised. Apex rather wide, apical border oblique, distinctly sinuate. Surface in basal third deeply striate and intervals markedly convex. Apical half feebly and irregularly striate. Foveae in third interval wide, moderately deep, not much contrasting. Surface rather uneven. Microreticulation rather conspicuous, consisting of very dense, more or less transverse meshes that are remarkably irregular around the discal foveae. Surface with strong sericeous lustre. Pilosity very sparse and short. Marginal pores comparatively large, contrasting. Wings short.

Lower surface. Metepisternum c.  $1.3 \times$  as long as wide. Abdominal sternites with extremely sparse and short pilosity, without distinct microreticulation. Terminal visible abdominal sternite with faint medial incision.

♂ genitalia. Unknown.

♀ genitalia (Fig. 2). Stylomere 2 medium-sized, rather curved, with dorsal ensiform and nematiform seta and with two ventral ensiform setae, namely a longer and stouter upper one and a smaller lower one. Apex of stylomere 1 with 1-2 elongate hairs. Lateral plate fairly densely setose.

Variation. Very little variation recognized.

**Distribution** (Fig. 10). Western part of Papuan Peninsula, Papua New Guinea. Known only from type locality.

**Collecting circumstances.** Caught in median altitude between 1400-2150 m, presumably in open places on the ground.

**Etymology.** The name is an acronym in honour of Mr. Peter Schönhuber who generously supported the biosystematic research at the Zoologische Staatssammlung München.

**Relationships.** This species belongs to the *chimbu*-group of New Guinean *Scopodes* (Darlington 1968, Baehr 1994, 1995, 1998) and probably is most closely related to *S. hornabrooki* Baehr and perhaps also to *S. perfoveatus* Baehr, even when the male genitalia of the latter species and of *S. schoenhuberi*, spec. nov. are still unknown. Apart from colouration and some slight differences in relative shape of prothorax and elytra, the main difference between *S. hornabrooki* and *S. schoenhuberi* is the incomplete elytral striation of the latter.

### Recognition

In the most recent key to the *altus*-, *chimbu*-, and *violaceus*-groups of the genus *Scopodes* (Baehr 1998) *S. schoenhuberi*, spec. nov. would key out at couplet 5, which should be altered as following (figures of preceding supplements added in bold type as **BA95** and **BA98**):

5. Colour bright green or cupreous; transverse striae of pronotum coarse and irregular; microreticulation of elytra very distinct; aedeagus with straight lower surface and with slightly knob-shaped apex, or unknown ..... 6.
  - Colour blackish-bronzed with greenish and purplish tinge; transverse striae of pronotum less coarse, rather regular; microreticulation of elytra superficial; aedeagus with evenly concave lower surface and with short, markedly knob-like apex (**BA98** fig. 1). Central Irian Jaya ..... *amplipennis* Baehr
6. Antenna black, only basal antennomeres yellowish; besides the foveae at 3<sup>rd</sup> stria elytra with a setiferous fovea in basal fourth of 5<sup>th</sup> stria (**BA95** fig. 3); aedeagus unknown. Western Highlands of Papua New Guinea ..... *perfoveatus* Baehr
  - Antenna yellow throughout, at most slightly darkened towards apex; elytra without additional fovea at 5<sup>th</sup> stria; aedeagus with straight lower surface and with slightly knob-shaped apex (**BA98** fig. 2) or unknown ..... 6a.
- 6a. Colour cupreous; elytral striae deep throughout; aedeagus with straight lower surface and with slightly knob-shaped apex (**BA98** fig. 2). Eastern Highlands of Papua New Guinea ..... *hornabrooki* Baehr
  - Colour bright green; elytral striae only in basal third deep, posteriorly very shallow; aedeagus unknown. Western part of Papuan Peninsula, Papua New Guinea ..... *schoenhuberi*, spec. nov.

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